## Soluble Lead Flow Battery Technology Dr. David Keogh / General Atomics & Prof. Y. Shirley Meng / UCSD

For the better part of the last century, the lead-acid battery has been the workhorse technology for a variety of energy storage applications. To date, few technologies can match the combination of low-cost, high-efficiency, proven reliability, and safety that lead-acid technology offers. For grid-scale energy storage applications, reductions in cost of the technology and extended cycle-life are still needed to enable widespread adoption. Within the GRIDS program, General Atomics (GA) and the University of California, San Diego (UCSD) are jointly developing a soluble lead flow battery design where the active lead material is dissolved into the electrolyte, which allows for the use of a single electrolyte and eliminates the need for the separator or membrane material, greatly simplifying system design and cost.





